Pharmacology Biochemistry and Behavior, Vol. 62, No. 4, pp. 754–760, 1999
© 1999 Elsevier Science Inc.
Printed in the USA. All rights reserved
0091-3057/99/$–see front matter

ELSEVIER

CONTENTS
VOLUME 62, 1999

Articles

Influence of different adrenoceptor agonists and antagonists on physostigmine-induced yawning in rats.
ZARRINDAST, M.-R., S. FAZLI-TABAI, S. SEMNANIAN and Y. FATHOLLAHI 1

Biochemical and behavioral effects of boldine and glaucine on dopamine systems.
ASENCIO, M., B. DELAQUERRIÈRE, B. K. CASSELS, H. SPEISKY, E. COMOY and P. PROTAIS 7

Early withdrawal from repeated cocaine administration upregulates muscarinic and dopaminergic D_2-like receptors in rat neostriatum.
SOUSA, F. C. F., P. B. GOMES, D. S. MACÊDO, M. M. F. MARINHO and G. S. B. VIANA 15

Behavioral effects of dopamine agonists and antagonists: Influence of estrous cycle, ovariectomy, and estrogen replacement in rats.
DÍAZ-VÉLIZ, G., M. S. BENAVIDES, S. BUTRÓN, N. DUSSAUBAT and S. MORA 21

The expression of behavioral sensitization to amphetamine: Role of CCK_A receptors.
DESOUSA, N. J., G. R. WUNDERLICH, C. DE CABO and F. J. VACCARINO 31

Baclofen and AII 3–7 on learning and memory proceses in rats chronically treated with ethanol.
KUZIEMKA-ŁĘSKA, M., H. CAR and K. WIŚNIEWSKI 39

FG 7142- and restraint-induced alterations in the ataxic effects of alcohol and midazolam in rats are time dependent.
AUSTIN, M., V. MYLES, P. L. BROWN, B. MAMMOLA and R. C. DRUGAN 45

Sex and estrous cycle-dependent changes in neurosteroid and benzodiazepine effects on food consumption and plus-maze learning behaviors in rats.
REDDY, D. S. and S. K. KULKARNI 53

Interleukin-1α injection into ventromedial hypothalamic nucleus of normal rats depresses food intake and increases release of dopamine and serotonin.
YANG, Z.-J., V. BLAHA, M. M. MEGUID, A. LAVIANO, A. OLER and Z. ZADAK 61

NMDA-induced spinal hypersensitivity is reduced by naturally derived peptide analog [Ser^1]histogranin.
HAMA, A. T., J. B. SIEGAN, U. HERZBERG and J. SAGEN 67

Cannabimimetic activity in rats and pigeons of HU 210, a potent antiemetic drug.
FERRARI, F., A. OTTANI and D. GIULIANI 75

Pharmacology Biochemistry and Behavior, Vol. 62, No. 4, pp. 754–760, 1999
© 1999 Elsevier Science Inc.
Printed in the USA. All rights reserved
0091-3057/99/$–see front matter

ELSEVIER

CONTENTS
VOLUME 62, 1999

Articles

Influence of different adrenoceptor agonists and antagonists on physostigmine-induced yawning in rats.
ZARRINDAST, M.-R., S. FAZLI-TABAI, S. SEMNANIAN and Y. FATHOLLAHI 1

Biochemical and behavioral effects of boldine and glaucine on dopamine systems.
ASENCIO, M., B. DELAQUERRIÈRE, B. K. CASSELS, H. SPEISKY, E. COMOY and P. PROTAIS 7

Early withdrawal from repeated cocaine administration upregulates muscarinic and dopaminergic D_2-like receptors in rat neostriatum.
SOUSA, F. C. F., P. B. GOMES, D. S. MACÊDO, M. M. F. MARINHO and G. S. B. VIANA 15

Behavioral effects of dopamine agonists and antagonists: Influence of estrous cycle, ovariectomy, and estrogen replacement in rats.
DÍAZ-VÉLIZ, G., M. S. BENAVIDES, S. BUTRÓN, N. DUSSAUBAT and S. MORA 21

The expression of behavioral sensitization to amphetamine: Role of CCK_A receptors.
DESOUSA, N. J., G. R. WUNDERLICH, C. DE CABO and F. J. VACCARINO 31

Baclofen and AII 3–7 on learning and memory proceses in rats chronically treated with ethanol.
KUZIEMKA-ŁĘSKA, M., H. CAR and K. WIŚNIEWSKI 39

FG 7142- and restraint-induced alterations in the ataxic effects of alcohol and midazolam in rats are time dependent.
AUSTIN, M., V. MYLES, P. L. BROWN, B. MAMMOLA and R. C. DRUGAN 45

Sex and estrous cycle-dependent changes in neurosteroid and benzodiazepine effects on food consumption and plus-maze learning behaviors in rats.
REDDY, D. S. and S. K. KULKARNI 53

Interleukin-1α injection into ventromedial hypothalamic nucleus of normal rats depresses food intake and increases release of dopamine and serotonin.
YANG, Z.-J., V. BLAHA, M. M. MEGUID, A. LAVIANO, A. OLER and Z. ZADAK 61

NMDA-induced spinal hypersensitivity is reduced by naturally derived peptide analog [Ser^1]histogranin.
HAMA, A. T., J. B. SIEGAN, U. HERZBERG and J. SAGEN 67

Cannabimimetic activity in rats and pigeons of HU 210, a potent antiemetic drug.
FERRARI, F., A. OTTANI and D. GIULIANI 75

Rat locomotion and release of acetylcholinesterase.
HEILAND, B. and S. A. GREENFIELD 81

5-HT_{2A} and 5-HT_{2C}/5-HT_{1B} receptors are differentially involved in alcoholic preference and consummatory behavior in cAA rats.
MAUREL, S., J. DE VRY, R. DE BEUN and R. SCHREIBER 89

The effects of the naltrexone implant on rodent social interactions and cocaine-induced conditioned place preference.
MITCHEM, L. D., C. K. KRUSCHEL, E. DALLMAN, K. A. ANDERS, M. CZAPIGA, J. J. PANOS and R. E. STEINPREIS 97

Lorazepam attenuates the behavioral effects of dizocilpine.
FAHEY, J. M., G. A. PRITCHARD, J. S. PRATT, R. I. SHADER and D. J. GREENBLATT 103

Parallel recovery of MK-801–induced spatial learning impairment and neuronal injury in male mice.
BROSNAN-WATTERS, G., D. F. WOZNIAK, A. NARDI and J. W. OLNEY 111

Possible involvement of a σ receptor subtype in the neck dystonia in rats.
NAKAZAWA, M., T. KOBAYASHI, K. MATSUNO and S. MITA 123

Presentation of an ethanol-paired stimulus complex alters response patterns during extinction.
SLAWECKI, C. J., H. H. SAMSON and A. CHAPPELL 127

The effects of neonatal cocaine exposure on a play-rewarded spatial discrimination task in juvenile rats.
WILLFORD, J. A., T. M. SEGAR, L. S. HANSEN-TRENCH and S. BARRON 137

Effects of neonatal naltrindole treatment on antinociceptive and behavioral responses to μ and κ agonists in rats.
FERNÁNDEZ, B., M. T. ANTELO, I. KITCHEN and M. P. VIVEROS 145

The type IV phosphodiesterase inhibitors, Ro 20-1724 and rolipram, block the initiation of cocaine self-administration.
KNAPP, C. M., M. M. FOYE, D. A. CIRAULO and C. KORNETSKY 151

The effects of diazepam and zolpidem on cocaine- and amphetamine-induced place preference.
MERIRINNE, E., A. KANKAANPÄÄ, P. LILLSUNDE and T. SEPPÄLÄ 159

Blockade of smoking satisfaction using the peripheral nicotinic antagonist trimethaphan
ROSE, J. E., E. C. WESTMAN, F. M. BEHM, M. P. JOHNSON and J. S. GOLDBERG 165

Differential behavioral effects of TFF peptides: Injections of synthetic TFF3 into the rat amygdala.
SCHWARZBERG, H., H. KALBACHER and W. HOFFMANN 173

Influence of sex and female hormones on nicotine-induced changes in locomotor activity in rats.
KANÝT, L., I. P. STOLERMAN, C. J. CHANDLER, T. SAIGUSA and Ş. PÖĞÜN 179

Nitrous Oxide-induced hypothermia in the rat: Acute and chronic tolerance.
RAMSAY, D. S., K. OMACHI, B. G. LEROUX, R. J. SEELEY, C. W. PRALL and S. C. WOODS 189

CONTENTS VOLUME 62 NUMBER 2 1999

Articles

Low-dose midazolam attenuates predatory odor avoidance in rats.
DIELENBERG, R. A., J. C. ARNOLD and I. S. McGREGOR 197

Altering dietary levels of protein or vitamins and minerals does not modify morphine-induced analgesia in male rats.
KANAREK, R. B., K. E. D'ANCI, J. M. PRZYPEK and W. F. MATHES 203

Acute and chronic effects of morphine under a progressive-ratio 25 schedule of food delivery.
JAREMA, K., C. MACOMBER, M. LESAGE and A. POLING 209

Nicotine and ethanol interaction on conditioned taste aversions induced by both drugs.
KUNIN, D., B. R. SMITH and Z. AMIT 215

Corticol damage enhances pemoline-induced self-injurious behavior in prepubertal rats.
CROMWELL, H. C., M. S. LEVINE and B. H. KING 223

The role of angiotensin II and of its receptor subtypes in the acetic acid-induced abdominal constriction test.
GEORGIEVA, D. and V. GEORGIEV 229

Destruction of the noradrenergic system with DSP_4 potentiates the behavioral effects of MK-801 in rats.
HATIP-AL-KHATIB, I. and F. BOLUKBASI 233

Cerebrolysin ameliorates performance deficits, and neuronal damage in apolipoprotein E-deficient mice.
MASLIAH, E., F. ARMASOLO, I. VEINBERGS, M. MALLORY and W. SAMUEL 239

Modulation of cocaine-induced antinociception by opioid-receptor agonists.
WADDELL, A. B. and S. G. HOLTZMAN 247

Neuronal sparing and behavioral effects of the antiapoptotic drug, (−)deprenyl, following kainic acid administration.
GELOWITZ, D. L. and I. A. PATERSON 255

Electrical stimulation of nucleus paragigantocellularis induces opioid withdrawal-like behaviors in the rat.
LIU, N., R. W. ROCKHOLD and I. K. HO 263

Effects of nicotine and stress on startle amplitude and sensory gating depend on rat strain and sex.
FARADAY, M. M., V. A. O'DONOGHUE and N. E. GRUNBERG 273

Acutely administered clozapine does not modify naloxone-induced withdrawal jumping in morphine-dependent mice.
BALLARD, T. M. and K. H. McALLISTER 285

Antinociceptive effects of cocaine in Rhesus monkeys.
GATCH, M. B., S. S. NEGUS and N. K. MELLO 291

Intraaccumbens raclopride attenuates amphetamine-induced locomotion, but fails to prevent the response-reinstating properties of food reinforcement.
CHAUSMER, A. and A. ETTENBERG 299

Chronic amphetamine facilitates immunosuppression in response to a novel aversive stimulus: Reversal by haloperidol pretreatment.
BASSO, A. M., G. GIOINO, V. A. MOLINA and L. M. CANCELA 307

Cyclic withdrawal from endogenous and exogenous progesterone increases kainic acid and perforant pathway induced seizures.
FRYE, C. A. and L. E. BAYON 315

Effects of SCH23390 and raclopride on anxiety-like behavior in rats tested in the black-white box.
TIMOTHY, C., B. COSTALL and J. W. SMYTHE 323

Behavior and drug measurements in Long–Evans and Sprague–Dawley rats after ethanol–cocaine exposure.
HOROWITZ, J. M., E. BHATTI, B. G. DEVI and G. TORRES 329

Ontogeny of ethanol-induced locomotor activity and hypothermia differences in selectively bred FAST and SLOW mice.
WOOD, R. D., E. H. SHEN, J. A. CHESTER and T. J. PHILLIPS 339

^{3}H-L-glutamate binding and ^{3}H-D-aspartate release from hippocampal tissue during the development of pentylenetetrazole kindling in rats.
SCHRÖEDER, H., A. BECKER, U. SCHRÖEDER and V. HOELLT 349

Latent inhibition in smokers vs. nonsmokers: Interaction with number or intensity of preexposures?
DELLA CASA, V., I. HÖFER and J. FELDON 353

Ascorbic acid antagonizes ethanol-induced locomotor activity in the open-field.
MIQUEL, M., M. A. AGUILAR and C. M. G. ARAGÓN 361

Ontogeny of muscarinic cholinergic supersensitivity in the Flinders sensitive line rat.
DAWS, L. C. and D. H. OVERSTREET 367

Involvement of intracellular calcium in morphine tolerance in mice.
SMITH, F. L., D. S. DOMBROWSKI and W. L. DEWEY 381

The effects of acute and repeated pyridostigmine bromide administration on response acquisition with immediate and delayed reinforcement.
VAN HAAREN, F., R. DE JONGH, J. B. HOY, J. L. KARLIX, C. J. SCHMIDT, I. R. TEBBETT and D. WIELBO 389

Stress and a glycinergic intervention interact in the modulation of MK-801-elicited mouse popping behavior.
DEUTSCH, S. I., R. B. ROSSE, B. L. SCHWARTZ, D. G. POWELL and J. MASTROPAOLO 395

CONTENTS VOLUME 62 NUMBER 3 1999

Articles

Acute toluene induces biphasic changes in rat spontaneous locomotor activity which are blocked by remoxipride.
RIEGEL, A. C. and E. D. FRENCH 399

The anxiogenic–like and anxiolytic–like effects of MDMA on mice in the elevated plus-maze: A comparison with amphetamine.
LIN, H. Q., P. M. BURDEN, M. J. CHRISTIE and G. A. R. JOHNSTON 403

Antipsychotic drugs and reproductive hormones: Relationship to body weight regulation.
BAPTISTA, T., D. REYES and L. HERNÁNDEZ 409

Differences in central and peripheral responses to oxotremorine in young and aged rats.
ESPÍNOLA, E. B., M. G. M. OLIVEIRA and E. A. CARLINI 419

Antinociception elicited by aversive stimulation of the inferior colliculus.
CASTILHO, V. M., V. AVANZI and M. L. BRANDÃO 425

Acquistion and expression of conditioned hypoalgesia in morphine-naive and morphine-tolerant rats.
FOO, H. 433

The role of ventrolateral striatal acetylcholine in the production of tacrine-induced jaw movements.
COUSINS, M. S., M. FINN, J. TREVITT, D. L. CARRIERO, A. CONLAN and J. D. SALAMONE 439

Classical conditioning during nitrous oxide treatment: Influence of varying the interstimulus interval.
GHONEIM, M. M., H. M. EL-ZAHABY and R. I. BLOCK 449

The effects of *d*–amphetamine on intake of food and a sweet fluid containing cocaine.
FOLTIN, R. W. and S. M. EVANS 457

Repeated cocaine exposure: Effects on catecholamines in the nucleus accumbens septi of periadolescent animals.
PHILPOT, R. M. and C. L. KIRSTEIN 465

Thujone exhibits low affinity for cannabinoid receptors but fails to evoke cannabimimetic responses.
MESCHLER, J. P. and A. C. HOWLETT 473

Rotational behavior in dopamine nigrostriatal denervated rats: Effects of a wide range of time intervals between apomorphine administrations.
CASAS, M., G. PRAT, P. ROBLEDO and F. JANÉ 481

CCK_A and $5\text{–}HT_3$ receptors interact in anorectic responses to amino acid deficiency.
AJA, S. M., J. A. BARRETT and D. W. GIETZEN 487

DA_1 receptor activity opposes anorectic responses to amino acid-imbalanced diets.
AJA, S. M., P. CHAN, J. A. BARRETT and D. W. GIETZEN 493

Antiaggresive and anxiolytic effects of gepirone in mice, and their attenuation by WAY 100635.
MENDOZA, D. L., H. A. BRAVO and H. H. SWANSON 499

Temporal oscillations of serum electrolytes in N-phthaloyl GABA-treated rats.
SUBRAMANIAN, P. and E. BALAMURUGAN 511

Ethopharmacological analysis of 5-HT ligands on the rat elevated plus-maze.
SETEM, J., A. P. PINHEIRO, V. A. MOTTA, S. MORATO and A. P. M. CRUZ 515

Behavioral and immunological effects of exogenous butyrylcholinesterase in rhesus monkeys.
MATZKE, S. M., J. L. OUBRE, G. R. CARANTO, M. K. GENTRY and G. GALBICKA 523

Intrathecal oxotremorine affects formalin-induced behavior and spinal nitric oxide synthase immunoreactivity in rats.
PRZEWŁOCKA, B., J. MIKA, F. CAPONE, H. MACHELSKA and F. PAVONE 531

Dextromethorphan attenuates ethanol withdrawal syndrome in rats.
ERDEN, B. F., S. OZDEMIRCI, G. YILDIRAN, T. UTKAN, N. GACAR and G. ULAK 537

The discriminative stimulus properties of EGb 761, an extract of *Ginkgo biloba*.
WINTER, J. C. and D. TIMINERI 543

Behavioral effects of AR-R 15849, a highly selective CCK-A agonist.
SIMMONS, R. D., F. C. KAISER and T. J. HUDZIK 549

Effects of dizocilpine (MK-801) on flash-evoked potentials, body temperature, and locomotor activity of hooded rats.
HETZLER, B. E. and H. K. BURKARD 559

TRH in therapeutic vs. nontherapeutic seizures: Affective and motor functions.
SATTIN, A., A. E. PEKARY and R. L. LLOYD 575

CONTENTS VOLUME 62 NUMBER 4 1999

Articles

Sedation and need-free salt intake in rats treated with clonidine.
DE LUCA, L. A., JR., R. L. N. DE SOUZA, M. M. YADA and E. W. MEYER 585

Effects of chronic antidepressants in an operant conflict procedure of anxiety in the rat.
BEAUFOUR, C. C., N. BALLON, C. LE BIHAN, M. HAMON and M.-H. THIEBOT 591

Diet-induced enhancement of naloxone sensitivity is independent of changes in body weight.
SHABIR, S. and T. C. KIRKHAM 601

Discriminative stimulus properties of ethanol in rats: Studies on the role of nitric oxide.
KOROS, E., W. KOSTOWSKI and P, BIENKOWSKI 607

Attenuation by nimodipine of amitriptyline-induced avoidance impairment in mice.
SANSONE, M., M. BATTAGLIA and F. PAVONE 613

The determination of the optimal dose of milnacipran in the olfactory bulbectomized rat model of depression.
REDMOND, A. M., J. P. KELLY and B. E. LEONARD 619

Dopaminergic projection to the nucleus accumbens mediates the memory-enhancing effect of angiotensins in rats.
WINNICKA, M. M. 625

Haloperidol does not attenuate conditioned place preferences or locomotor activation produced by food- or heroin-predictive discriminative stimuli.
MCFARLAND, K. and A. ETTENBERG 631

Neurotransmitter system interactions revealed by drug-induced changes in motivated behavior.
MONTGOMERY, A. M. J. and A. J. GROTTICK 643

A dopamine D_1 agonist elevates self-stimulation thresholds: Comparison to other dopamine-selective drugs.
BALDO, B. A., K. JAIN, L. VERALDI, G. F. KOOB and A. MARKOU 659

Specific behavioral effects related to age and cerebral ischemia in rats.
ANDERSEN, M. B., J. ZIMMER and F. SAMS-DODD 673

Restored cognitive function in rats with combined denervations in the temporal region: Neurochemical aspects.
MYHRER, T. 683

Differences in anxiolytic-like profile of two novel nonbenzodiazepine BZ (ω) receptor agonists on defensive behaviors of mice.
GRIEBEL, G., G. PERRAULT and D. J. SANGER 689

Chronic fluoxetine in tests of anxiety in rat lines selectively bred for differential 5-HT_{1A} receptor function.
FILE, S. E., A.-M. OUAGAZZAL, L. E. GONZALEZ and D. H. OVERSTREET 695

Dose dependency of sex differences in the effects of repeated haloperidol administration in avoidance conditioning in mice.
ARENAS, M. C., C. VINADER-CAEROLS, S. MONLEÓN, A. PARRA and V. M. SIMÓN 703

Estrogen improves working but not reference memory and prevents amnestic effects of scopolamine on a radial-arm maze.
FADER, A. J., P. E. M. JOHNSON and G. P. DOHANICH 711

Effects of diazepam or chronic alcohol treatment on spatial reversal learning in mice.
BORDE, N. and D. J. BERACOCHEA 719

Behavioral effects of diazepam in the murine plus-maze: Flumazenil antagonism of enhanced head dipping but not the disinhibition of open-arm avoidance.
DALVI, A. and R. J. RODGERS 727

TDCC-induced anorexia and wasting syndrome in rats: Effects of diet-induced obesity and nutrition.
TUOMISTO, J. T., R. POHJANVIRTA, M. UNKILA and J. TUOMISTO 735

Blockade of nicotine self-administration with nicotinic antagonists in rats.
WATKINS, S. S., M. P. EPPING-JORDAN, G. F. KOOB and A. MARKOU 743

Index to Volume 62. 754